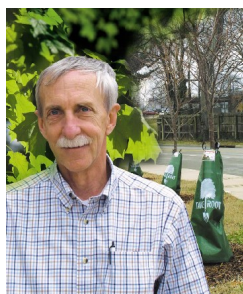


# 2014 State of the Trees Report

Department of Public Works  
Division of Urban Forestry

## 2014 – A Forester's Perspective

2014 was characterized by some interesting changes and a return to drought conditions. In 2013 we were blessed by an abundance of rainfall with a surplus of 16 inches but this year there was a deficit of nearly seven inches. We started the year with a paralyzing snowstorm. It only took an inch or so of snow on already-frozen streets to create a layer of ice that completely paralyzed the city. However the big change for this year is the addition of the Parks-Landscape shop to



*Gene Hyde is editor of this publication.*

the Forestry and Emergency division. This move occurred back in May and will take some additional time to blend the units together. The Parks—Landscape shop consists of seventeen people who are responsible for the daily maintenance on park grounds, playgrounds,

and facilities to ensure they remain safe and attractive. These crews maintain over 430 acres on 80 sites throughout the city. The new Urban Forestry Master Plan was completed and printed. We are still battling the Emerald Ash Borer. And in June we discovered that new EAB finds have spread several miles away from the original epicenter. Arbor Day this year was held on Glass Street. A total of eighteen Trident Maple and Ginkgo trees were planted as part of a streetscapes/neighborhood revitalization project. In the spring the \$200K tree planting Endowment Grant from the State of Tennessee expired. During the summer GPS Tracker devices were installed on all of our vehicles. This will allow for better management of time and resources for the combined work groups. Finally I noticed in late summer that an unusually high number of our American Elms had died so an in-depth investigation will be conducted in 2015. More on these stories and other news is contained within this report.



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## Arbor Day on Glass Street

The annual Arbor Day celebration was held this year on Glass Street as part of an effort at neighborhood revitalization and community building. Located in East Chattanooga, Glass Street had experienced a period of decline until recent efforts led by the Glass House Collective began to turn things around. As the Collective says on their website, "We gather diverse teams of talent to help revitalize historic Glass Street in Chattanooga." And their efforts have begun to pay off. Buildings are now being reclaimed, businesses are beginning to move in and signs of new life are springing up everywhere. The Collective has been instrumental in launching

summer camps for art, building, and other subjects. Neighborhood street cleanups, design workshops, and other activities are regularly scheduled. On March 7th and 8th a total of 18 Trident Maple and ginkgo trees were planted by over 200 volunteers representing Volkswagen, local schools, and the East Chattanooga neighborhood.



*Volunteers work to install trees as part of a neighborhood revitalization effort.*

### Special Points of interest in 2014:

- Chattanooga was a "Tree City" for the 24th year.
- Arbor Day was held on Glass Street on March 7.
- At the end of 2014 there was a backlog of 22 work orders.

## Tree Planting in 2014

In 2009 the City of Chattanooga received a \$200,000 Endowment Grant from the Tennessee Department of Economic and Community Development for tree planting. The trees purchased and planted with these funds were intended as mitigation plantings to compensate for all of the trees that were removed in 2008 at the new Volkswagen assembly plant in the Enterprise South Industrial Park. These planting funds were shared with the local Parks Department as well as Neighborhood Services. The final tally is in and it appears that during the life of the grant a total of 1,693 trees were planted in various streetscapes, neighborhoods, and tree wells around the City. There were a total of 69 species of trees and two species of shrubs utilized in the



*A Volkswagen Volunteer helps to plant a Trident Maple tree on Glass Street On March 8, 2014..*

planting schemes.

Not included in the grant a total of 217 trees representing 26 species and cultivars were planted by the Urban Forestry operations at a cost of \$42,076. These were mostly street trees that died during the year for various reasons.

A total of 63 new trees representing seven species and cultivars were planted for Streetscapes projects. The total cost for this operation was \$11,053.



*Newly planted Chinese Pistache trees on Riverside Drive*

In addition, City Forester and Tree Commission member Mariah Prescott participated in the Replanting Apison initiative to plant more than 200 trees in an effort to replace trees killed by the 2011 tornadoes.

## Parks—Landscape Joins us

In May of 2014 the Parks—Landscape section was reassigned to the Urban Forestry and Emergency section. This group consists of 17 people and the crews perform daily maintenance on park grounds, playgrounds, and facilities to ensure that they remain attractive, safe, and inviting to residents. Crews in this section maintain over 430 acres for both active and passive parkland in over 80 sites throughout the city. At large park sites, grounds maintenance supervisors are stationed and maintain all grounds and facilities at these locations. Crews also maintain over 12 miles of greenways, trails and paths, 82 tennis courts, 47 athletic fields, 34 pavilions and picnic shelters, 33 playgrounds, 21 swing sets, and all park amenities includ-



*The stream in Heritage Park provides an attractive place to enjoy nature.*

ing benches, trash receptacles, bike racks and outdoor fitness equipment. Other activities include the daily unlocking of park gates and restrooms, and the general maintenance of park restrooms. A mechanic is assigned to this unit to keep equipment maintained and repaired. The parks included in grounds maintenance are parks adjacent to recreation centers, pocket parks, and large parks such as Greenway Farms, Heritage Park, Rivermont Park, and East Lake Park. Many of the parks are contractually mowed but still require other maintenance activities by city personnel. We look forward to the challenge of merging these functions with Forestry to create a logical and efficient operating unit.



*New trees are planted during Arbor Day, 2011 in Jefferson Park*

## Status of Service Requests

Responding to service requests is the single most time consuming and expensive aspect of our urban forestry operations. These requests pour in from a variety of sources including the 311 center, Fire and Police Departments, the Hamilton County Education Department, sister divisions within City Wide Services, and other City departments. In 2005 we switched software programs for tracking work orders. The Tree Manager software program was replaced by City Works which can be used throughout the entire Department of Public Works. In 2013 the 311 Call center records indicate that we received exactly 1,066 requests as shown below and that we solved all

except 22. The most current four years of information are provided for comparison.

	<u>2014</u>	<u>2013</u>	<u>2012</u>	<u>2011</u>
General Tree Problems	71	77	95	65
Fallen Trees and Branches	476	420	545	1,023
Tree Removal/Hazard	204	200	216	340
Tree Trimming	<u>315</u>	<u>303</u>	<u>267</u>	<u>257</u>
Totals	1,066	1,000	1,123	1,685

## What's New?

In 2014 the Urban Forestry Master Plan was completed and printed. This plan answers the questions:

1. What do we have?
2. What do we want?
3. How do we get it?
4. How do we know if we got it?

The prior management plan was completed in 1999 and served us well for many years. However innovations in technology, additional personnel, new city code, new insect threats, a reconfigured downtown and other changes necessitated that a new plan be made to meet the current needs and challenges. This plan addresses all the trees within the community but focuses particularly on the publicly owned trees for which the City bears responsibility. The community forest includes native, non-



native, naturally grown, intentionally planted, ornamental, and invasive species. It is important to note that the multi-layered forest includes not only trees but also shrubs, vines, grasses, herbs, vertebrate and invertebrate animals, soils, and root

mycorrhiza that all function together as a living system. The inventory data for this plan were derived from information that focused on the trees and tree canopies. However, the management strategies incorporated into the plan are intended to recognize that all components of the community forest contribute to the health of the environment. A copy of the plan is posted on the Urban Forestry website.

In the summer of 2014 all of the Forestry, Emergency, and Parks vehicles were outfitted with GPS tracker devices. This is a management tool which will allow for more efficient operation by tracking speeding, excess idling, and an array of other functions. Managers are immediately e-mailed violations in the form of an “alert” and the offender is quickly identified and counselled the same day. According to City Forester Gene Hyde, “We quickly began to see positive results as both excess idling and speeding have drastically reduced.”

In 2014 we lost three Tree Commission members who either resigned or who rolled off the Commission. June Coppinger, Adele Glascock, and Jon Nessle all served for many years and were very supportive and productive. However we gained three outstanding replacements : Mariah Prescott, Craig Walker, and Elizabeth Tallman.

## Challenges to the Urban Forest

The USDA Forest Service issued a technical report in 2010 which it identified seven specific challenges. The question is how will we deal with them. These challenges are:

1. Insects and diseases. In 2013 the Emerald Ash Borer (EAB), an invasive insect that attacks and destroys only ash trees, was discovered in Chattanooga for the first time. EAB is believed to have been introduced into the Detroit, Mich. area approximately 20 years ago on wood packing material from Asia. Since then, the destructive insect has killed millions of ash trees across 23 states mainly in the north and Midwest as well as in two Canadian provinces. City Forester Gene Hyde estimates that approximately 2,000 ash trees are growing on the City's rights-of-way and another 200,000 ash trees exist within the corporate boundaries of the city. This insect is spreading and threatens every ash in the city. The cyclical native Southern Pine Beetle is due to make a return



*The Emerald Ash Borer*

— possibly in the near future. We have yet to see Thousand Canker Disease of Walnuts which is causing great damage in nearby counties. Root rot and decay continue to weaken our large oak trees.

2. Wildfire. There is

no historic evidence that this is a problem but the potential is there as a real threat to our larger wooded parks.

3. Natural Catastrophic Events. The devastating tornadoes of 2011 and FEMA level flood events proved that Nature is both powerful and unpredictable. We can expect more of these in the future.
4. Invasive Plants. Kudzu, English Ivy, Shrub Honeysuckle, and Privet are invasive exotic plants that are out of control. It's nearly impossible to find a spot within Chattanooga free of invasive plants. Efforts to exterminate even small plots have only been marginally successful. This is a difficult battle that will continue well into the future.
5. Air Pollution. Ozone has been documented to reduce tree growth, reduce resistance to bark beetle, and increase susceptibility to drought. Pollutant particles have a wide effect on trees and that heavy metals can accumulate in the soil causing damage and death to some species.
6. Additional Development. Development in and around forested urban areas can lead to forest fragmentation which will impact plant and wildlife populations, forest biodiversity and health, and parcelization of forests.
7. Climate Change. We can expect warmer air temps, altered precipitation patterns and more extreme temperature and weather events. Climate change has the potential to exacerbate all of the threats described above. We're reacting by planting heat and drought tolerant trees.



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**We're on the Web!**  
**[WWW.Chattanooga.gov/urbanforestry](http://WWW.Chattanooga.gov/urbanforestry)**

### Chattanooga Tree Commission Members:

Dr. Hill Craddock  
Glen Craig  
Deborah Kendrick  
Lisa Lemza  
Jan Pass  
Mariah Prescott  
Elizabeth Tallman  
Craig Walker  
Sally Wencel, Chair

Administrator of Public Works:  
Lee Norris

Director of City-Wide Services:  
Jim Templeton

The Urban Forestry program functions as a separate operation within City Wide Services. Its mission is to provide the City with a safe and attractive urban forest, and to educate citizens about the benefits and proper care of trees. It is guided by the nine-member Tree Advisory Commission as appointed by the Mayor. The Forestry section draws on other elements within both Public Works and Parks to assist with tree planting, solving service requests, and other missions. The program's main operating budget for FY '13-'14 of \$794,214 is derived strictly from annual appropriations.

This report is prepared annually at the request of the Tree Advisory Commission.

## Staffing

In 2009 the Urban Forestry operations were expanded to include the Emergency Department.

Listed below are the current employees in their assigned sections:

### Urban Forestry:

Tree Trimmers: Wayne Pinkerton, Caleb McMillin

Equipment Operator 4: Bruce Richie, Dexter Joshen, and Mike Compton

Crew Supervisor 2: Mike Richie, Jim Willson, and Milton Stewart

Forestry Supervisor: Jerry Mauldin

### Emergency:

The Emergency Department has the responsibility for the removal of chemical spills along roadways as well as dead animal pick-ups, litter pick-up, and discarded tires. They also are on call at night for fallen trees, pothole repair, and other mishaps that present a hazard to travelers along City streets. There is always a round-the-clock Emergency Department worker on duty every day of the year!

Workers include:

Crew Worker 1: Johnny Williams, Johnnie Bowen, and Sean Willyerd

Equipment Operator 1: Alvin Thomas, and Eric Cox

Equipment Operator 3: Vacant

Equipment Operator 4: Pat Darr, Sherman Sales, Sherman Higdon, Cle Heard, Carlos Shackelford, and David Lanford.

Crew Supervisor 2: Terry McCullough

